National Institute of Environmental Health Sciences

Challenges and research needs in climate change and human health: A case study on heat waves

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Conference:	Mathematical Challenges for Sustainability Workshop held 15-17 November 2010 (New Brunswick, NJ)
Year:	2010
Publisher:	Rutgers University Center for Discrete Mathematics & Theoretical Computer Science (DIMACS)

Abstract:

Climate change is anticipated to influence public health through a wide range of pathways, largely through exacerbating health risks that exist in the current day. Air pollution levels may be affected, especially for pollutants with photochemical formation such as ozone. The distribution of infectious diseases, such as malaria and dengue fever, may shift into populations that have not been previously affected. Changes in temperature and precipitation patterns as well as in the frequency, intensity, and distribution of floods and droughts may affect water-borne diseases, including cholera. Impacts on natural disasters (e.g., floods, hurricanes) can result in displacement, resulting in infectious disease and conflict. Altered weather patterns can affect agriculture, thereby impacting nutrition and hunger.

Source: http://dimacs.rutgers.edu/SustainabilityReport/bell-dominici10-12-10.pdf

Resource Description

Early Warning System: ☒

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure : ☒

weather or climate related pathway by which climate change affects health

Temperature

Temperature: Extreme Heat, Fluctuations

Geographic Feature: ☒

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☒

resource focuses on specific location

Global or Unspecified

Health Co-Benefit/Co–Harm (Adaption/Mitigation): ☑

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Injury, Other Health Impact

Other Health Impact: heat related mortality

Mitigation/Adaptation: ☑

mitigation or adaptation strategy is a focus of resource

Adaptation, Mitigation

Model/Methodology: ☑

type of model used or methodology development is a focus of resource

Methodology, Other Projection Model/Methodology

Other Projection Model/Methodology: discussion only

Resource Type: ☑

format or standard characteristic of resource

Review

Timescale: ☑

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ☑

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content